REMARKS

The present Preliminary Amendment is submitted to delete the multiple dependencies of claims 6-9, 24, 27, 31, 41, 45 and 53, thereby placing such claims in condition for examination and reducing the required PTO filing fee.

Copies of the amended portion of the claims with changes marked therein is attached and entitled "*Version with Markings to Show Changes Made*."

Respectfully submitted,

Akihito YOSHIIE et al.

By _____
Michael S. Huppert
Registration No. 40,268
Attorney for Applicants

MSH/kjf
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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direction of deformation of said one-way clutch system.

6. The power-assisted bicycle as claimed in claim 4 [or 5], wherein said detection system detects stress deformation of said elastic member as said physical amount.

7. The power-assisted bicycle as claimed in [any one of] claims 1 [to 5], wherein said detection system detects the position of at least one of parts structuring said one-way clutch system relative to the body frame as said physical amount.

8. The power-assisted bicycle as claimed in [any one of] claims 1 [to 5], wherein said detection system detects a relative position relationship between at least two parts structuring said one-way clutch system as said physical amount.

9. The power-assisted bicycle as claimed in [any one of] claims 1 [to 5], wherein said detection system detects a variation in pressure in resistance to a direction of deformation of said one-way clutch system as said physical amount.

10. The power-assisted bicycle as claimed in claim 1, wherein said one-way clutch system is a ratchet gear.

11. The power-assisted bicycle as claimed in claim 10, wherein said ratchet gear is arranged to deform expanding or contracting to a length in accordance with said pedaling force in the axial direction of said drive shaft.

12. The power-assisted bicycle as claimed in claim 11, wherein said ratchet gear comprises:

a tooth part with a plurality of ratchet teeth formed

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detecting a deformation of said ratchet piece with respect to said second engagement face.

20. The power-assisted bicycle as claimed in claim 15, wherein said detection system comprises a piezoelectric sensor for detecting a pressure of said elastic unit applied from said rear face.

21. The power-assisted bicycle as claimed in claim 15, wherein said elastic unit comprises a disc spring.

22. The power-assisted bicycle as claimed in claim 21, wherein said disc spring is provided with a plurality of strain gauges as said detection system.

23. The power-assisted bicycle as claimed in claim 22, wherein said control system assumes a pedaling force for determining said assisting power by subjecting signals from said plurality of strain gauges to at least an addition operation.

24. The power-assisted bicycle as claimed in claim 22 [or 23], wherein said plurality of strain gauges are disposed on a surface of said disc spring in positions rotation-symmetrical to each other.

25. The power-assisted bicycle as claimed in claim 15, wherein said elastic unit is a coil spring.

26. The power-assisted bicycle as claimed in claim 15, wherein said elastic unit is made of an elastic rubber.

27. The power-assisted bicycle as claimed in [any one of] claims 15 [to 26], wherein an offset elastic member is disposed, which deviates either one of said tooth part or said piece part so as to create a clearance between said

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rear face and said elastic unit, when said pedaling force is lower than a predetermined value.

28. The power-assisted bicycle as claimed in claim 15, wherein said elastic unit is supported with a supporting member mounted on said drive shaft so as to be rotatable and axially slidable.

29. The power-assisted bicycle as claimed in claim 28, wherein said supporting member is connected to said sprocket.

30. The power-assisted bicycle as claimed in claim 28, wherein said supporting member is a hollow cylindrical member and supports said elastic unit at a bottom face inside said hollow cylindrical member.

31. The power-assisted bicycle as claimed in [any one of] claims 28 [to 30], wherein said supporting member is mounted on said drive shaft through a bearing.

32. The power-assisted bicycle as claimed in claim 15, wherein said rear face of either one of said tooth part or said piece part with which said elastic unit abuts is provided with a loading bearing or a sliding bearing.

33. The power-assisted bicycle as claimed in claim 32, wherein said bearing is composed of a plurality of steel balls inserted rotatably into a circular groove formed in said rear face.

34. The power-assisted bicycle as claimed in claim 15, wherein said rotation-preventive system is composed of a ball spline.

35. The power-assisted bicycle as claimed in claim 15,

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said bore and extending in said axial direction, and one or more rows of grooves formed in said drive shaft so as to accommodate said protruding portions.

40. The power-assisted bicycle as claimed in claim 35, wherein said rotation-preventive system comprises a plate member extending over the entire diameter of said bore and connected to an inner wall of said bore, and a through groove formed in said drive shaft penetrating throughout said drive shaft in said axial direction; and

wherein said plate member is slidably fitted into said through groove.

41. The power-assisted bicycle as claimed in [any one of] claims 15 [to 29], wherein said ratchet piece is composed of a rigid body and arranged so that its lengthwise direction pivots about a direction at a given angle with respect to said second engagement face.

42. The power-assisted bicycle as claimed in claim 15, wherein said ratchet piece is composed of an elastic member.

43. The power-assisted bicycle as claimed in claim 42, wherein said detection system is a deformation detection sensor for detecting a stress deformation of said ratchet piece.

44. The power-assisted bicycle as claimed in claim 42, wherein said detection system is a position sensor fixed to a bicycle body frame for detecting the amount of the axial displacement of said tooth part.

45. The power-assisted bicycle as claimed in [any one of] claims 10 [to 14], wherein an elastically holding unit having

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elasticity for rotatably holding said sprocket on a bicycle body frame is disposed such that it resists deformation of said one-way clutch system.

46. The power-assisted bicycle as claimed in claim 45, wherein said detection system is a deformation sensor for detecting a stress deformation of said elastically holding unit.

47. The power-assisted bicycle as claimed in claim 45, wherein said elastically holding unit holds said sprocket so as to provide a region where an axial width of said one-way clutch system overlaps with an axial width of said elastically holding unit in an axial position.

48. The power-assisted bicycle as claimed in claim 45, wherein said elastically holding unit holds said sprocket from the side at which said one-way clutch system is mounted on said sprocket and from the opposite side.

49. The power-assisted bicycle as claimed in claim 48, wherein:

said sprocket has an elongated hollow cylindrical portion extending toward a one plate face side from a sprocket side;

said one-way clutch system is accommodated in a hollow portion inside said elongated hollow cylindrical portion; and

said elastically holding unit holds said sprocket from the outer periphery of said elongated hollow cylindrical portion.

50. The power-assisted bicycle as claimed in claim 49,

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wherein a bearing is engaged in the outer periphery of said elongated hollow cylindrical portion; and said elastically holding unit holds said bearing and fixes said bearing to a bicycle body frame.

51. The power-assisted bicycle as claimed in claim 50, wherein said bearing is disposed to withstand a load from a radial direction and the axial direction.

52. The power-assisted bicycle as claimed in claim 50, wherein said elastically holding unit is formed to support in a state in which said bearing is covered therewith, and a one end portion thereof is composed of an elastic body in a disc form fixed to a bicycle body frame.

53. The power-assisted bicycle as claimed in [any one of] claims 1 [to 52], wherein said assisting power is transmitted through a sprocket drive gear engaged with said sprocket.